

Amendments to the Specification

Please replace the paragraph beginning at page 2, line 12, with the following rewritten paragraph:

Transformed cells having BAPAT activity, which allows the cell to convert beta-alanine to 3-HP through a malonate semialdehyde intermediate, are disclosed. Such cells can be eukaryotic or prokaryotic cells, such as yeast cells, plant cells, fungal cells, or bacterial cells such as *Lactobacillus*, *Lactococcus*, *Bacillus*, or *Escherichia* cells. A particular example of such cells were deposited with the American Type Culture Collection (Manassas, VA) on December 6, 2004 (Accession No. PTA-6411). In one example, the cell is transformed with a BAPAT nucleic acid sequence that confers to the transformed cells BAPAT activity.

Please replace the paragraphs beginning at page 37, line 24, with the following rewritten paragraphs:

The DNA polymerase used was cloned Pfu Turbo DNA pol (Stratagene) with the following PCR amplification program: 95°C for 30 seconds, 30 cycles of 95°C for 30 seconds, 60°C for 30 seconds, and 72°C for 3 minutes, followed by 72°C for 10 minutes. The PCR reaction was digested with *DpnI* and the product gel-purified as above. The fragment was then used as a "mega-primer" in a QuikChange (Stratagene) extension reaction as described by Kirsch and Joly (*Nucl. Acids Res.* 26:1848-50, 1998), using pPRO-PaBAPAT as template. The resultant plasmid carrying a *P. aeruginosa* beta-alanine/pyruvate aminotransferase and an *mmsB* gene in tandem under the expression control of the $P_{lac/ara}$ promoter is referred to as pBm1. The cloned *mmsB* cDNA sequence is shown in SEQ ID NO: 27, and the corresponding amino acid sequence in SEQ ID NO: 2428.

Cells carrying pBm1 formed 0.09 g/L 3-HP when grown, expressed, and the culture medium analyzed as described in Example 4. These cells were deposited with the American Type Culture Collection (Manassas, VA) on December 6, 2004 (Accession No. PTA-6411).